

Lonely At The Top? CEO Sensemaking In The Boardroom

Athanasopoulou, A., Smets, M., Risi, D. & Morris, T.

(January 2020 version)

ABSTRACT

Amidst the uncertainty and ambiguity characterizing CEO's role, issues or events that are "novel, ambiguous, confusing, or in some other way violate expectations" (Maitlis & Christianson, 2014: 57) mobilize CEOs to seek information and to challenge their - and others' - understanding. Drawing on in-depth qualitative interviews with 146 global CEOs, we conduct a micro-level analysis of how CEOs seek, process and make sense of information via their interactions with the TMT and others as part of their decision-making process. We explore the interchangeable and power-charged process of sensemaking and sensemaking through which meaning-making and eventually decision-making occur. The process involves CEOs (nominally) conceding some of their power and voice to others, before retaining them prior to making a decision. CEOs invite dissension and hence, also invite multivocality (and as a result also equivocality) from their environment and seek to test or validate sensemaking and crystalize it into decisions. Our findings unpack the micro-dynamics of CEO decision-making drawing on the CEO-TMT interface, managerial cognition and decision-making literatures.

Keywords:

Sensemaking; Decision-making; Chief executive officer (CEO); CEO-TMT interface; Qualitative study; Top management team (TMT)

INTRODUCTION

Decision makers operate in turbulent, complex and ambiguous organizational contexts, but are “boundedly rational” (Eisenhardt & Zbaracki, 1992: 17). Their choices are “ultimately political”, enhancing their power by engaging in political tactics (including the use of information) (Eisenhardt & Zbaracki, 1992: 27). In our study we focus on those charged with making organizations’ thorniest decisions - CEOs. There is very limited research into the co-creation of sensemaking at the C-suite level and particularly the interactions between the CEO and others, such as the TMT (Bromiley & Rau, 2016).

This dearth of research on the cognitive influences at the CEO-TMT level and on the links between power and sensemaking (Balogun et al., 2014; Brown et al., 2015) provide a strong motivation to unpack CEO sensemaking in interaction with their TMT. The competition among multiple accounts of sensemakers and the associated effects and tradeoffs relating to equivocality produced by the interaction of different sensemakers have also been signposted by Maitlis and Sonenshein (2010: 571-572) as areas warranting further investigation. In environments where research access is limited due to elite status, such as the C-suite, such an exploration is rare, yet potentially very insightful due to the sensemaking dynamics involved.

To address this gap, we draw on a unique dataset of in-depth qualitative interviews with 146 CEOs, aiming to understand how CEOs source information, interact with their environment (TMT and others) and make sense of the organizational reality to make more informed decisions. For our study we draw on the CEO-TMT interface, managerial cognition and decision-making literatures (e.g. Bromiley & Rau, 2016; Maitlis & Christianson, 2014; Arendt, Priem, & Ndofofor, 2005; van Knippenberg et al., 2015). Throughout our findings a common thread is oscillation manifested in three dimensions: a. interaction dynamics between the CEO and others; b. between rational and intuitive decision-making and c. between different types of sense-making, sensegiving, sensedemanding and sensehiding. Our contributions are threefold.

First, we uncover the dynamics of CEO-TMT/others interaction, manifesting itself as a pendular exchange of power and voice between the CEO and others. Secondly, we unpack the dynamic interplay of rationality and intuition in CEO decision-making in complex situations, which proves to be a much less linear process than typically implied in the literature. Thirdly, we explore the underlying mechanisms of collective meaning making inside organizations which are based on continuously negotiated relations of power manifested through the management of multivocality and equivocality by the CEO. We propose a model that simultaneously captures the individual and the social dimension of sensemaking and calls for engagement in four different types of ‘sense’ processes: sensemaking, sensegiving, sensebreaking and sensehiding.

THEORETICAL BACKGROUND

In the following, we first present research on the CEO-TMT interface, second discuss scholarship on how this interface influences CEO decision making, and thirdly elaborate on sensemaking research and discuss the dynamics of sensemaking.

CEOs and the Top Management Team (TMT) Interface

The literature has traditionally consolidated CEOs and other TMT members into a single category, obscuring any potential dynamics between the two (Peterson, Martorana, Smith & Owens, 2003). Accordingly, we lack research on cognitive influences at the CEO-TMT interface (Bromiley & Rau, 2016) and CEO cognition more broadly. As such the CEO-TMT interface literature tends to focus on two key themes. The first studies how CEO personality affects TMT group dynamics and the links between CEO personality and firm outcomes. The second is around the “psychological safety” that the CEO creates to allow open interactions and facilitate decision-making. We will go into these two aspects in more detail below.

The impact of CEOs on how TMT behaves. As far as CEO personality and its impact on TMT group dynamics go, much of the research has studied the role of CEOs with a transformational leadership style, humility and openness and their effects on organizational commitment and

performance (e.g. Ou et al., 2014; Ling, Simsek, Lubatkin & Veiga, 2008; Peterson, Martorana, Smith & Owens, 2003). Overall, elite teams with a leader who is open to the influence of others tend to perform better (Peterson, 1997). CEOs who are more open to new experiences are regarded as strong leaders (Peterson et al., 2003). Also, CEOs who project humility are able to better connect with their TMT by creating collective or shared perceptions of empowerment at both levels (i.e. enhancing the meaningfulness of work, fostering participation in decisions, expressing confidence in high performance and providing autonomy) (Ou et al., 2014). The emphasis of such CEOs is on contributing to TMT integration; members collaborating, sharing information and making joint decisions. They share a common vision which consequently has collective positive effects at lower levels of the organization. Such CEO openness is found to be significantly related TMT risk-taking and intellectual flexibility (Peterson et al., 2003). Individuals that are open to new experiences tend to value intellectual matters, be interested in unusual thought processes, and are seen as thoughtful and creative (McCrae & Costa, 1997).

The impact of CEOs on how TMT thinks. CEOs influence not only how the TMT behaves but also how it thinks. Team performance is influenced by the existence or lack of “psychological safety”, defined as “a shared belief held by members of a team that the team is safe for interpersonal risk taking” (Edmondson, 1999: 350). Psychological safety is, for instance, team members’ feeling that they will not be rejected for making a mistake and that there is openness within the team to discuss one’s own mistakes and those of others. Within a CEO-TMT interaction context, one could say that the psychological safety concept manifests itself in the circumstance that team members feel safe to speak up when they do not agree with their leader, without feeling that they take a risk. Moreover, and related to this, Edmondson (1999) found that psychological safety is clearly associated with learning behavior, contributing to collective learning processes. Edmondson (1999) found that the psychological safety provided to a team plays a critical role in the successful operation of a team. Overall, team psychological safety impacts learning behavior, which in turn impacts team performance (Edmondson, 1999).

Hence, context support and team leader coaching, along with shared beliefs, influence team outcomes, specifically with regards to team learning behavior and team performance.

The flipside of a context that nurtures ‘psychological safety’ is one where CEO’s leadership stifles independent thinking. This is often met in the literature in studies looking into the impact of CEO narcissism on their behavior and interactions with the TMT (Gerstner, König, Enders & Hambrick 2013; Chatterjee & Hambrick, 2007; Chatterjee & Pollock, 2017). Drawing on different rewards, punishments, and influence tactics, such CEOs leave little space for openness and independent decision-making and control interactions with – and within – the TMT. According to Peterson (1997), early research on leadership style suggested that directive leaders tend to be the main reason for defective processes and poor outcomes in group decision making. Yet, the way this directiveness is managed seems to have a significant effect as to whether directiveness brings positive outcomes or not (e.g. the quality of relationships between members, how good use is made of information, how good are the produced solutions). Peterson (1997: 1107) found that the type of directiveness determined the effects. Specifically, process directiveness, i.e. the extent to which “a leader regulates the process by which the group reaches a decision”, was seen as a strong predictor of quality of group process and outcomes. Conversely, outcome directiveness, i.e. the extent to which “a leader advocates a favored solution”, was associated with a much smaller and less coherent range of group outcomes.

CEO Decision-Making

In recent years there has been growing interest in research at the intersection of decision-making, leadership and information processing (e.g. van Knippenberg et al., 2015; Joseph & Gaba, *in press*). There are two distinct types of information-processing systems in human beings (Dane & Pratt, 2007: 35-36): a. “the automatic and relatively effortless processing and learning of information” (described as “experiential” or “tacit”) and b. individuals’ learning of information which is deliberate, meant to develop ideas and engage in analyses in an “attentive manner” (“rational” or “deliberate”). These two systems of knowing are combined in decision-

making. Information is conveyed in different ways within organizations. For instance, Patriotta (2003: 373) found that organizational routines are replaced by narratives as “the main carriers of organizational (tacit) knowledge”. As CEOs seek to make sense of their environment, process information and make more informed decisions, one can identify different patterns of interactions with their context and CEOs’ attention channeled in certain directions accordingly with effects on their decision-making.

Context and CEO decision-making. The context within which the CEO-TMT interface takes place also shapes the kind of decisions drawn. For instance, there is a distinct stream of research looking into the relationship between organizational structure, individual cognition, and decision making based on the notion “that organizational structure creates differentiated contexts that lead to distinct responses to environmental information” (for a review see Joseph & Gaba, in press: 33). According to Ma, Kor & Seidl (2019) the context of CEO advice seeking consists of the strategic context, the governance context and the CEO’s personal context. All three interplay and shape the source, type, and nature of advice CEOs seek. For example, Gerstner, König, Enders and Hambrick (2013: 257) found that when there is high audience engagement in an environment in which a CEO operates, the CEO is more likely to make more aggressive strategic decisions. One other aspect of context and how it shapes CEOs’ decision-making is time and timing of decision. Jianhong and Nadkarni (2017) found time and timing of decision-making to be critical. They identified two distinct CEO temporal dispositions, namely time urgency (i.e. “the feeling of being chronically hurried”) and pacing style (i.e. “one’s pattern of effort over time in working toward deadlines”), which have an impact on CEOs’ temporal leadership behaviors and eventually on their strategic behavior (ibid: 31). Jianhong and Nadkarni (2017) observe that CEOs’ temporal leadership behaviors are context specific meaning that the type of industry they operate in will influence the timing of a decision. Nadkarni and Chen (2014: 1810) also explore CEOs’ temporal focus, meaning the extent to which CEOs “characteristically devote attention to perceptions of the past, present, and future”.

They found that the type of environment CEOs operate in interacts with the type of focus they have and determines the speed by which new products are introduced.

CEO attention and advice seeking. Attention is a recurring theme in the CEO-TMT and decision-making literature with studies looking into CEOs' attention to certain issues and how their attention is shaped from their interactions with the TMT (Yadav, Prabhu & Chandy, 2007; Ma, Kor and Seidl, 2019). According to Ma et al. (2019), the attention-based view is one of three promising theoretical perspectives (the others being neo-institutionalist theory and practice theory), which are key to upper echelons research, but have been underutilized in the CEO advice-seeking literature. This is because advice seeking can influence the kind of issues a CEO pays attention to and engages with, the CEO's attention structure influences the potential sources of advice that a CEO will engage with (e.g. focusing on particular advisers and not others) and how CEOs tend to deal with the advice they receive. The attention-based view posits that the way in which a firm channels and distributes the attention of its decision-makers determines the behavior of the firm (Ocasio, 1997). Specifically, decision-makers' actions are shaped by the type of issues and answers they are focusing their attention on which depend on the situations at hand and how the company has organized its communication and procedures around issues, answers and decision-makers. Yadav, Prabhu and Chandy (2007) found that CEOs' attention is a critical driver to innovation and that CEOs have over time a positive, direct and long-term impact on firms' detection, development and deployment of new technologies. A leader's attention to the way in which decisions are made by elite teams instead of the decision itself will lead to more leader support and group confidence as well as higher quality group decision processes, which eventually result in better decision-making (Peterson, 1997). CEOs' attention is focused not only on the issues at hand that require a decision but also on whom (or with the support of whom) they make a decision. CEOs select adviser/collaborators who are similar to them in terms of attitudes, values and demographic characteristics (Mooney & Amason, 2011), or they enjoy a strong personal relationship with (Roberto, 2003). Often

such advisers serve as “a sounding board for the CEO’s ideas” (Eisenhardt, 1989a: 559). Other times, the CEO ignores advice, arguably as power makes them more self-focused and, thus, more likely to act upon their preferences (Pitesa & Thau, 2013).

Arendt, Priem and Nodfor (2005) introduced the CEO-Adviser model as an intermediate model of strategic decision making. Arendt et al. (2005) suggest that there are three models of CEO involvement in the strategic decision-making process. The first is CEO model where the CEO is the strategic decision maker, gathering information from surrounding managers, but then processing the information, developing a strategy and directing its implementation on their own. The second is the CEO-Adviser model whereby the CEO is the principal decision maker, but draws on the support of both internal and external advisers with whom there is dyadic communication between the CEO and advisers. According to this model, the CEO selects advisers and it is characterized by a consultative decision-making style in that the CEO listens to the adviser’s ideas but then makes decisions alone, having the ultimate discretion on the final decision and being accountable to it. Finally, the TMT model suggests that the company’s top management is the strategic decision maker, with TMT members bringing critical information to the group, jointly generating and assessing alternatives, settling disagreements to reach a common decision and together participating in strategy implementation. Arendt et al. (2005) propose the CEO-Adviser model as an as an intermediate model of strategic decision making which depends on environmental dynamism, the organizational strategy employed, CEO’s leadership style and CEO tenure and the adviser selection. So, the role of context is critical.

According to research on CEO behavior and interactions, CEOs do not rely just on their TMT to make more informed decisions, but also may draw on support from others based on their needs. According to Ma & Seidl (2018), new CEOs have two types of needs guiding them in the configuration of their team of immediate collaborators: a. strategic orientation needs that involve the need to find collaborators who possess the required competences and commitment regarding the CEO’ s strategic initiatives and who can also serve as a special task force and b.

personal integration needs that involve finding collaborators who can provide access to key information, allowing the CEO to test ideas and satisfying the CEO's need for personal fit. Ma and Seidl's (2018) observation is in line with earlier research by Roberto (2003) who found that different groups, with members coming from various organizational levels, are formed with a view to make various strategic decisions and a subset of the TMT forms the core of a decision-making body involved in strategizing. They suggest that the composition of this constellation tends to differ from that of the TMT in the sense that it sometimes comprises of a subgroup of the TMT and in others, it includes individuals outside the TMT such as staff members or lower-level managers. The management of such constellations requires considerable fine-tuning based on trial and error. Any discrepancies between the strategic leadership constellation and the TMT cause tensions which trigger a convergence process between the two groups, particularly as the CEO's needs evolve and as the constraints on the CEO to change the TMT also evolve over time (Ma & Seidl, 2018). Such observations echo Ocasio, Pozner & Milner (2019) who argue that political capital utilization within an organization extends beyond the upper echelons. Ocasio et al. (2019: 4) define political capital as "the variety of economic, social, and cultural resources available to individuals and groups to affect organizational decisions, actions, and outcomes". Organizational members from different levels and with different formal positions can affect the organizational strategy. So, the CEO-TMT interaction is as critical in how decisions are managed as is how the parties involved make sense of decisions to enact them.

Making Sense of Sensemaking?

Scholars do not agree on a single definition of sensemaking (Brown et al., 2015: 266), but they do concede that it is a systemic (Weick et al., 2005: 412), social process (Maitlis & Christianson, 2014: 66), "through which people work to understand issues or events that are novel, ambiguous, confusing, or in some other way violate expectations" (Maitlis & Christianson, 2014: 57). This is triggered once discrepancies occur between expectations and reality (Maitlis & Christianson, 2014: 70). Such occurrences "when noticed, interrupt people's ongoing flow,

disrupting their understanding of the world and creating uncertainty about how to act” (Maitlis & Christianson, 2014: 70). The “reciprocal influence between action and the environment during sensemaking is known as enactment” (Maitlis & Christianson, 2014: 84). According to Weick (1979: 165) sensemaking “is thought to involve activities of negotiations between people as to what is out there. Less prominent in these analyses is the idea that people, often alone, actively put things out there that they then perceive and negotiate about perceiving. It is this initial implanting of reality that is preserved by the word enactment.”

The sensemaking perspective is made up of five main constituents (see Sandberg & Tsoukas, 2015: 26). It is confined to specific episodes (i.e. organizational activities interrupted until they are satisfactorily restored), it is triggered by ambiguous events (which can be major or minor planned/unplanned events), it occurs through specific processes (that is, creation, interpretation, and enactment), generates specific outcomes (i.e. a specific sense on which actors act) and is influenced by several situational factors (i.e. contexts, cognitive frames, language, identity, politics, emotion, and technology) (Sandberg & Tsoukas, 2015: 26). The proliferation of research on sensemaking has produced new typologies such as first- and second-order sensemaking, which distinguishes between meaning creation during disruptive events and the discourses and narratives employed to make sense of the sensemaking of organizational members (Sandberg & Tsoukas, 2015; Brown, 2000).

The social dynamics of sensemaking. A substantial stream of research at the intersection of decision-making and information-processing focuses on information attention patterns. Joseph & Gaba (in press) note the situated nature of cognition and decision-making within organizations, stressing the role of interactions rather than individual sensemaking and the implications this has for organizational behavior. For instance, the authors argue that interactions which are situated and embedded help explain the link between organizational structure and conflict in decision-making. According to Joseph & Gaba (in press) two possible explanations exist: a. differences in information interpretation which stem from limits of

accessibility or limits of activation of frames, categories, and vocabularies that trigger sensemaking or b. differences in attention, based on the assumption that decision makers could cope with multiple goals in different ways. CEOs' primary role when initiating strategic change can be best understood in terms of sensemaking but also sensegiving (Gioia & Chittipeddi, 1991). Sensemaking "is both an effect, and productive, of what are continuously negotiated relations of power" (Brown et al., 2015: 269) involving a complicated interplay of other sense-processes such as sensebreaking, sensedemanding and sensehiding (Maitlis & Christianson, 2014). On the other hand, sensegiving is "the process of attempting to influence the sensemaking and meaning construction of others toward a preferred redefinition of organizational reality" (Gioia & Chittipeddi, 1991: 442). This is facilitated by leaders' discursive ability and process facilitators (routines, practices, and structures) (Maitlis & Lawrence, 2007: 57). Sensemaking is retrospective while sensegiving is prospective (Sandberg & Tsoukas, 2015). Critical to the latter are interpersonal, face-to-face conversations as the key to organizational knowing (Mengis & Eppler, 2008) and decision-making (Gunia et al., 2012). Sensebreaking is "the destruction or breaking down of meaning" (Pratt, 2000: 464) and precedes sensegiving. It disrupts previous assumptions and prompts sensemaking (Bishop, Trevino, Gioia & Kreiner, in press). Acts of sensebreaking include offering contradictory evidence, giving very negative evaluations, providing the overall picture, presenting alternative views and questioning assumptions (Vlaar et al., 2008: 229). Via sensebreaking, previously held conceptions are reframed and other team members' attention is redirected and solutions sought (ibid: 241). According to Bishop et al. (in press), if an emotional sensebreaking event generates a meaning void, alternative narratives to aid sensemaking and sensegiving are sought out. This calls for sensedemanding which is the process by which individuals "seek to ameliorate the quality of the information upon which they base their decisions", undertaking strenuous efforts to acquire and process information to establish "a workable level of uncertainty" and "equivocality" (Vlaar et al., 2008: 240; see also Weick, 1969: 40). Finally,

individuals employ sensehiding whereby “the discourse can be mobilizing in terms of promoting a specific kind of thinking and action or manipulative in terms of hiding particular ideas” and, being inherently political, it serves the purpose of discursive legitimation (Vaara & Monin, 2010: 6). According to Vlaar et al. (2008) sensegiving, sensedemanding, and sensebreaking are particularly critical in helping geographically dispersed collaborators to find shared, common, or mutual understandings. These processes are also pertinent to CEO’s interaction with multiple stakeholders as part of their day-to-day process of decision-making.

Sensemaking, rationality and intuition. A critical aspect on CEO’s interaction with the TMT or other advisers in day-to-day decision-making is how any emerging information is made sense of. As noted earlier, at the heart of sensemaking is a distinction on how information is processed by individuals during decision-making. With CEOs engaging under pressure with a multiplicity of complex decisions at hand, a study of such processes is critical. Bromiley & Rau (2016: 196) conclude that there is much scope in studying cognitive influences on CEOs and TMTs as well as the links between CEO power and CEO-TMT interactions, their information-processing and CEO tendencies for intuitive or analytical decision-making (Bromiley & Rau, 2016: 196).

In the last two decades we see increasing calls for a shift from rationalist to intuitive models in decision-making recognizing the often unconscious processes that have a definitive impact on how CEOs make sense of the world around them and guide their decisions (e.g. Haidt, 2001; Sonenshein, 2007; Sadler-Smith, 2016). Elbanna & Child (2007) identify rationality, intuition, and political behavior as three key strategic decision-making process dimensions. Haidt (2001) expresses his doubt on the causal importance of reason, essentially finding the rationalist approach to be flawed in that most of the cognition happens automatically and beyond consciousness. It happens thanks to intuition defined as “a form of information processing that differs from rational, or analytical, processes” (Dane & Pratt, 2007: 35). As such, there is a growing stream of research now examining intuition in decision-making (e.g. Salas et al. 2010; Miller & Ireland, 2005; Patton, 2003). Haidt (2001) and Sonenshein (2007) have also criticized

the rationalist approach. Among other things, the rationalist approach has failed to address equivocality (i.e. the existence of several simultaneous interpretations and the associated sensemaking ambiguity) and uncertainty which are bound to exist (Sonenshein, 2007). Similarly, Haidt (2001) differentiated between the contrast of intuition and reasoning and the contrast of emotion and cognition. In line with Weick (1979), Sonenshein (2007: 1022) proposed a sensemaking-intuition model on the basis that “individuals engage in sensemaking under conditions of equivocality and uncertainty”. Reflecting on this theoretical backdrop, our study seeks to answer the following critical research question: *How do CEOs’ interactions with others influence CEOs’ sensemaking when making C-suite decisions?*

RESEARCH METHODS

This study is part of a larger research project that examines the question of how CEOs develop the competence to lead in a changing world. Due to our interest in CEOs’ sensemaking and decision-making, adopting a qualitative methodology is a logical choice as it helps us understand the world “from the perspective of those studied (i.e., informants)” (Pratt, 2009: 856). Our research grounds on the interpretivist tradition suggesting that “the social world is already interpreted before the social scientist arrives” (Blaikie, 2000: 36). The scientist’s task, therefore, is to interpret the interpretations of the study’s participants, relying “as much as possible on the participants’ view of the situation being studied” (Creswell, 2003: 8).

Research Context and Sampling Strategy

It is notoriously difficult to gain access to elite managers, particularly those in top management positions (Thomas, 1993; Kakabadse et al., 2015). The total number of interviews obtained for this research is unusually large for qualitative studies of CEOs. To achieve this unprecedented scale, the authors drew on the joint resources of a globally leading business school specialized in leadership education and Heidrick and Struggles, one of the world’s largest executive search firms. These organizations solicited interviews with their contacts on behalf of the authors.

We gained direct access to 146 CEOs with an average tenure of 6.5 years, responsibility for 46,000 and revenues in excess of USD\$14 billion. The sample covers a cross-section of regions including Africa, Asia Pacific, Latin America, Europe, the Middle East/North Africa, and North America, as well as sectors, including consumer goods, finance, industry, life sciences, professional services, and technology companies. Women CEOs made up 8% of the sample.

Data Collection

We approached that examination qualitatively, conducting rich, personal conversations with 152 CEOs representing a wide range of sectors around the world, generating unique and detailed insights into how global CEOs lead. These in-depth, semi-structured interviews were, with few exceptions, conducted face-to-face. All interviews were transcribed verbatim and anonymized prior to analysis. Assured of their anonymity, the CEOs reflected candidly on their experience of leadership. Open-ended questions allowed them free rein to elaborate and gave us a glimpse of today's business world through the eyes of its most senior leaders.

In interviews having an average length of 55 minutes, we asked questions in connection with our effort to understand these executives' own thinking about their journey to the top, their lived experiences in the corner office, and their advice to those who aspire to the position of CEO. Given our special interest in CEOs' sensemaking, we asked them particularly about events (decision triggers) which were ambiguous, confusing and in some way violating CEOs' or others' expectations (see e.g., Maitlis & Christianson, 2014: 57). Our questioning addressed two aspects in particular: First, we wanted CEOs to focus especially on "toughest" decisions they have to make (with probes on how they make the decision and the effects it has on them personally). Two thirds of our interviewees referred to people decisions as their toughest decisions involving laying-off colleagues or shutting down a business and firing large numbers of employees. Essentially, such decisions fall into the category of violating expectations. Second, our questioning concentrated on how CEOs describe their feelings before making a "major decision" (with probes on whether they doubt, how they cope with it and what their

sources of support are) and how CEOs prepare themselves for uncertainty and change (with probes on sources of insight and how they recognize situations where the established ways of thinking prove inadequate). In total, we collected 8,360 minutes of interview data with these leaders. The data encompassed numerous thick descriptions of CEO sensemaking and decision making in situations which seemed (at least initially) novel, ambiguous or confusing for CEOs. This wealth of data is explained by the fact that problems that make it up through the organization to the office of the CEO are usually non-routine and non-trivial. The CEOs frequently noted that only the thorniest problems landed on their desk, since easier decisions were dealt with lower down in the organization. Thus, the issues they face are ones that disturb the ‘taken-for-granted’ state of things, providing an ‘extreme case’ where sensemaking activities become more readily visible (Eisenhardt, 1989b; Bamberger & Pratt, 2010), similar to the high performance teams and crisis situations that have so often been the focus of previous sensemaking research (e.g. Weick, 1993).

Data Analysis

We used an inductive, open-ended approach to analyze our data (Gioia, Corley & Hamilton, 2013) and supported our analysis with NVivo qualitative data analysis software. Below we explain how we progressed across three different levels of increasing abstraction.

The *first-order* analysis involves processing the raw data to identify an initial set of codes, and classifying in different groups the descriptions of those codes that the informants provided. It came to light that CEOs, when we asked them to describe the changing role of CEOs nowadays, consider their role as constituted by a continued sequence of sensemaking triggers. For example, one CEO said that his life could be described as an ongoing process of sensemaking as he permanently faces “*a highly volatile environment*” in which things are “*very volatile and subject to change at very short notice*” [051]. This was echoed also in another CEO’s response with regard to how she prepares herself for uncertainty: “*I’m in a permanent state of unreadiness, I think, or preparation for the unexpected*” [110]. This initial assessment provided

insight into several successive sub-phases covering the entire process of CEO sensemaking and decision-making in today's dynamic and complex business world. At the end of this first stage of analysis, we had several first-order category codes at our disposal.

We then started the subsequent step of *second-order* analysis. In order to move from the descriptive first-order insights toward more theoretical second-order themes, we further analyzed the data and studied the literature to support our analysis. We continuously iterated back and forth between data and literature, and gradually began to develop theory (Locke, 2001). At periodic intervals, the authors cross-checked the data coding to ensure mutual understanding of the coding approach and emerging concepts. Working together as a research team, the authors regularly discussed the work-in-progress and the themes the data was yielding. Through reflexivity and the use of tools such as theoretical memoranda, the research questions were gradually elaborated, and the data sorted in new categories of meaning. Finally, we came up with several second-order themes. On the one hand, these themes informed about the different steps of the CEO sensemaking and decision-making process. On the other, they emphasized the interactionist character of this process and indicated the role of specific actors at a given point in time.

On the highest level of analysis that leads to *aggregate dimensions*, we gradually processed additional data to identify how the key constructs of the analysis interacted. Specifically, we categorized raw data, linked categories to themes, and aggregated them into third-order dimensions. The result of this final step of analysis was three aggregate dimensions presenting the three main phases of CEO sensemaking and decision-making. Comparing these phases again with the interview data allowed us to additionally validate them. On the basis of this validation, we concluded that the analysis had reached the point of "category saturation" and that there was no need to collect further data (Strauss & Corbin, 1998).

Table 1 provides a graphic representation of our inductive reasoning process and shows how we moved from our empirical raw data to more abstract theoretical categories (aggregate

dimensions) that reflect the main phases characterizing the interaction between the CEO and others in CEOs sensemaking and decision-making which we will subsequently develop.

Insert Table 1 about here

FINDINGS

Our data suggested three main phases characterizing the interaction between a CEO and others. Each phase encompasses several successive sub-phases. Our findings thus provide a systematic insight into how CEOs' interaction with others influences their sensemaking during C-suite decision-making. To facilitate comparisons between interview statements, we used anonymized interview identifiers to code direct CEO quotes (numeric identifier-region-sector).

Collection

In the 'Collection' phase, the CEO tries to source as much information as possible. During this phase, the CEO seeks information to make better sense of the situation. This information seeking often happens both internally and externally to the organization to get unfiltered views. The Collection phase is, by far, not cognitive alone. Instead CEOs appear to purposefully engage in interactions that allow them to "experience" information rather than simply collect it, subsequently translate this information into meaning and then enact on the basis of their sensemaking. In fact, we found that the key drivers of this phase are as much cognitive as they are experiential. The collection phase encompasses three different activities.

CEO demands sense inside/outside the organization (Phase I). CEOs seek information (sensedemanding) via social interactions and personal reflection from travelling, conversations, observation and reading. Sensedemanding is thereby understood as CEOs' engagement in a variety of strenuous efforts to seek and gather good information on which they then may base their decisions. Our analysis led us to identify three aspects of CEOs' sensedemanding.

The first aspect is *sourcing information*. One CEO explains this activity aimed at getting as much information as possible as follows:

Depending on the situations, trying to document myself more, trying to deepen the knowledge in various ways, and (...) pose a lot of questions to people who can give some contribution even when I still don't have all the information yet. Because often by giving only a part of the information I try to extract what seems to be part of the answer. (140 EUR Industrial)

This quote illustrates the CEO's efforts to obtain sufficient information and the related systematic documentation of previously gathered information. Asking different people questions helps a CEO to collect particular knowledge and fill any knowledge gaps. Finally, combining the individual knowledge components with a simultaneous addition of newly collected information may help incrementally gain enough knowledge about a global issue.

The second aspect is *sensing the nuances of the environment*: One CEO explains this experiential way of collecting information as follows:

And the risk is when you have a company that is big and powerful as (...) we are, you can lean it and it will lean. And so you've got to always be thinking about how it fits together and (...) if a consumer-led recession occurred (...), if a global crisis occurred, (...) if oil prices dropped a lot, how would you survive that? (168 NA Finance)

The CEO's statement illustrates the importance of taking into account the nuances of the environment as, for instance, a global economic crisis or an oil crisis leading to an immediate drop in oil price. More precisely, the CEO brings risk considerations to the fore so as to illuminate the importance of anticipating different environmental expectations. Adequately sensing these nuances and the associated potential risks stemming from the environment is highly relevant since this activity allows a CEO to make the right decisions.

The third aspect is about *getting insight into unfiltered views*. One CEO explains this information-seeking activity as follows:

And I'm talking competitive edge, (...) to produce a better product for less money using technology. (...) This morning I met with fifteen new joiners, some of them technology, some of them marketing, some of them finance, asking them 'what's new'. If they're recently out of school, if they've been working somewhere else, you know, what's your experience, what's new, how are you using technology differently than we might." (015 EUR Services)

By the example of technology and product innovation, the CEO illuminates the importance of getting insights into unfiltered views. This type of views expects the CEO to gain for example from young innovators and new company joiners in particular. The following two issues further

elaborate on how important access to such views is. First, these exchanges take place regularly and frequently. Given a CEO's busy schedule, the regularity and frequency indicate their importance. Second, the CEO emphasizes their relevance for the competitiveness of the company as a whole and for the development of competitive products in particular.

Others give sense to CEO. At this point, various actors are trying to influence a CEO's sensemaking, whereas the CEO does not seem to be averse to such influence attempts. We identified three aspects clarifying how CEOs invite sensegiving by external and internal actors.

The first aspect is that *external stakeholders provide informative support*. One CEO explains:

We've had difficulty with our [COUNTRY] business this year and we've been implanting a major turnaround. There you have to have the wisdom to go and find support and advice. (...) So it's being prepared to actually say I don't know, and then being prepared to reach in and find out who's had those experiences and try and learn from them." (006 EUR Consumer)

By the example of a major turnaround the CEO explicates how important it was to draw on people who made similar experiences. The CEO is thereby actively looking for people who are better acquainted with the situation of a corporate turnaround, is actively seeking advice from them and gladly adopts their views on what to do in this situation. Especially since the CEO has never experienced such a situation before, the information provided by external stakeholders importantly influences CEO's thinking and interpretation of this specific situation.

The second aspect is that *personal, family and private life influences CEO*. One CEO explains this type of influences as follows:

It's that network, it's family. I think family is very important in that as well. There's nothing like a very good other half to reveal some of your stupid thoughts. (...) - and you also read a lot as well, (...) but it's mainly the network (...)" (006 EUR Consumer)

This quote illuminates how relevant it is for a CEO to be able to draw on a family and private network. The influence of such a network is shown by the fact that the CEO can put own ideas up for discussion in a casual way and that, for example, a spouse even tells the CEO when an idea is just bad. Hence, a CEO invites close friends and family members to think along and is willing to be persuaded of better arguments if necessary.

The third aspect is that *actors from within the organization advise CEO*. One CEO explains this type of influences as follows:

[H]ow does the CEO make those decisions? (...) he has to be sure that he has the right staff that provides him with the data (...) Well for instance, (...) just thinking of Elizabeth, she's the investment relations manager. So she is a part of the decision support system, if I have to make any decision with regard to (...) investors' relations (...). (016 APAC Tech)

The CEO emphasizes the relevance of actors within the company who support a CEO's decision making. The example of the investor relations manager further elucidates how relevant such an internal actor is for the CEO's investment decisions. Such a manager provides the CEO with the necessary data on the basis of which the CEO can then make decisions in connection with any issues relating to the investors.

CEO makes sense of the context (Phase I). At the end of the 'Collection' phase, the CEO tries to make sense of the previously collected information about their context. We identified four aspects clarifying and influencing the way CEOs make sense of their contexts.

The first aspect is that *biographical background influences CEO*. One CEO explains the importance of such background as follows:

You can go back to the early childhood years and reflect on figures that were around you (...) that gave you a very solid grounding with respect to your values and beliefs and the way they behaved. So, very early role models with respect to (...) just base behaviors in the way that you deal with other humans and you go about your business. (001 APAC Industrial)

The statement above explains the importance of a CEO's biographical background and in particular the way childhood years influence personal values and beliefs and ideas about how to behave adequately. More specifically, biographical background strongly affects a person's character because a CEO refers to old roles models, and the values which they have always embodied and lived up to, both in everyday actions and in the business everyday life.

The second aspect is *retrospective rationalizing*. One CEO explains the activity of ascribing some meaning to a decision in retrospect as follows:

(..) he was a good guy and he's not here anymore and I altered his career trajectory. (...) I really think that I gave him every opportunity to choose to stay here in a different role and I think he would have been successful at it, and he said he didn't want it and we treated him fairly on the way out and (...) It wasn't fair to the company to keep him... (070 NA Consumer)

The quote illuminates how the CEO retrospectively rationalizes the firing of a senior manager and the associated influence on the senior manager's career. In the specific case here, such rationalization takes place with regard to fairness towards both the individual and the organization. First, the CEO draws attention to the alternative career opportunities that were presented to the person, but the manager did not want to go into these in turn. The CEO thus judges the behavior to be fair towards the person. Second, the CEO illuminates that the position had to be filled due to business reasons. The CEO thus feels that the decision made was equally fair in relation to the organization too.

The third aspect is *seeking solutions*. One CEO explains how this activity is done:

Exactly that, reflection, i.e., to have a good understanding of the consequences of the various alternatives and assess them and then make a choice about what is the point of equilibrium... and there is a great variety of decisions. (143 EUR Tech)

This quote explains the seeking of solutions through reflection. More specifically, it is about reflecting on the consequences, their corresponding alternatives and the associated variety of decisions. According to the CEO, the systematic examination of the possible decisions and the possible alternatives resulting from them finally allows to determine the best suitable decision.

The fourth aspect is *intuition as a moderator*. One CEO explains the functioning of intuition in connection with the CEO's efforts to make sense of a specific situation as follows:

(...) intuition I think is a wonderful, wonderful thing. (...) And we meet our clients and just sometimes there's something that tells you that it's not the right place to be. (...) not because they're corrupt or bad people, it's just because they're looking at a different thing. But that's with intuition, because I have nothing to select it, (...), they are not from Chile, they have a clean record in their countries, but there's something that tells me that our relationship is not going to work. (013 NA Services)

The CEO explains the general importance of intuition and then further elaborates on its role in case of selecting the right clients. Interestingly, intuition seems to be particularly useful in cases where the information about a particular client is very low. In such a scenario, the intuitive feeling guides the CEO in deciding not to enter into a particular business relationship.

Consultation and Contestation

The ‘Consultation & contestation’ phase is highly political. In this phase, we observed sensebreaking, equivocality and power-breaking (between the CEO and the team). While the CEO seeks advice and tries to make sense of the complexities associated with the decision, he/she is simultaneously being challenged and also challenges and gives sense to the team.

CEO demands sense from TMT (Phase II). CEOs often talked about actively selecting members in their team that would have different views from their own. They also discussed about actively encouraging others to dissent, to speak up and challenge the CEO’s view. We identified two aspects clarifying how CEOs invite dissension from their team members. The first aspect is *communicating and collecting feedback from the team*, described as follows:

I guess you have to have a team that you feel comfortable having discussions with along that sort of nature, so honest and open discussions and getting feedback, you know, two-way dialogue, two-way feedback around that, but ultimately you’ve got to make the decision, nobody’s going to make the decision for you. (105 EUR Finance)

The CEO’s statement illuminates the importance of communicating and collecting feedback from the team by highlighting the relevance of having a close and intense two-way dialogue with the team. Trust and honesty are thereby the basic prerequisites for such a dialogue. To the extent that these conditions are met, such a dialogue allows a CEO to become quickly aware of the pros and cons associated with a potential decision. However, and as emphasized by the quote, the decision must finally be made by the CEO.

The second aspect is *seeking dissent*. One CEO illustrates the way of actively encouraging others to dissent as follows:

(...) consulting with let’s say the core team around you, (...) try to involve as many different points of view as well and also deliberately consulting with people who you expect to be going in a different direction than you think you will be going, sort of make sure that you have the devil’s advocate in the room. (...) Or the black hat or whatever technique you want to use for it. (086 MENA Consumer)

By drawing on the techniques of the “Devil’s Advocate” and the “black hat”, the CEO explains the importance of seeking dissent. Hence, this means that it is very important to be surrounded by people who normally would go in a totally different direction and tend to see things in a

different way. The CEO always keeps these people close to him, always approaches them actively and asks them for their personal opinions on a specific topic.

TMT breaks sense toward CEO. After CEO's invitation for feedback and dissent, the team takes this into effect and proceeds with sensebreaking, thereby essentially engaging in the destruction of what the CEO has previously made sense of. We identified two aspects that further explicate how team members break sense.

The first aspect relates to when *the team cognitively challenges CEO assumptions*. One CEO illustrates the way in which the team engages in such an activity as follows:

[O]ne of the most important things is having people around you that tell you how wrong you are. And I have luckily a group of people that are incredibly smart, incredibly good at what they do and generally – I say generally, not always – but generally unafraid to tell me that I'm completely kooky or thinking about things the wrong way. (019-NA Services)

The quote explains how relevant it is to have a team that intellectually challenges the CEO and his/her assumptions. Specifically, it is really important to have team members who are, on the one hand, experts in a certain area and on the other, openly point out where the CEO is wrong. In addition to the cognitive dimension, there is a second aspect labelled as *emotional support from the team*. One CEO explains how the team provides such type of support:

I have a tremendous relationship with my team and with my people, never is as perfect as you would like it but you will always try to get as close to perfection as you can and that will be a tremendous source of support. (133 MENA Industrial)

The CEO explains how critical it is to have a good interpersonal relationship with the different members of the team. It is this type of relationship that provides a CEO with critical support.

TMT gives sense toward CEO. After breaking CEO's sense, the team gives sense to a CEO.

Two aspects further explain how the team actively influences CEO's sensemaking. The first aspect relates to the circumstance that the *team and colleagues advise the CEO*:

Some of the toughest spaces over the last ten years have been in agriculture, (...) but our MD and myself are very close and we help each other. So at times when he makes an odd move or is feeling pressure and emotions, we've been both threatened to be locked up in the country by Ministers on the front pages, so it's not like a simple conversation. He and I help each other. (...) And a couple of times he had to catch me (...) (122 AFR Consumer)

The quote illustrates that the CEO is open to advice from the team and colleagues and the managing director (MD) in particular. In extreme and turbulent situations, the CEO is frequently looking for advice and help from the managing director. The CEO and the managing director have already gone through a lot together and mastered difficult situations as the one described. Due to this close relationship, the MD influences the CEO accordingly.

The second aspect is about when *team and colleagues suggest how a CEO may think and act*.

One CEO explains how those actors advise a CEO as follows:

[W]hat I typically do is get a senior person (...) He's been in the firm for a lot longer than I have and is a wise guy and (...) he'll be very blunt with me and he also understands the nuances of what's going on because he's worked with a lot of CEOs. So I find that process very helpful and (...) you learn, you know: So I'm going to do this faster. (020 NA Services)

The above quote illustrates the way team and colleagues suggest how a CEO may think and act.

More specifically, the CEO draws on the advice of a senior person who has worked with a lot of other CEOs before. The senior person indicates how the CEO may deal with certain situations and challenges and this facilitates a faster learning curve for the CEO. In fact, the senior person's advice seems to strongly influence both the CEO's actions and thinking.

CEO makes sense of own prior decisions (Phase II). While a CEO has made sense at the end of the collection phase (Phase I), we identified four other aspects indicating a later point of renewed sensemaking aimed at evaluating a CEO's prior decisions.

The first aspect refers to the circumstance that a *CEO needs to refresh understanding & develop new ideas*. One CEO explains those two related activities as follows:

(...) if you have a good team, those decisions are easier (...) (a) because you've got a good team and they have different skills and experiences, (b) you tend to come up with things you haven't thought of. (...) And so when I'm thinking when I have a difficult decision, it's how soon can I pull the team together to really talk through this. (123 NA Finance)

The CEO clearly depicts the role of a good team in order to meet the challenge that a CEO needs to refresh understanding and develop new ideas. More specifically, drawing on a team firstly allows to access different skills and experiences and secondly provides a breeding ground for new ideas. The CEO summarizes and generalizes again the importance of the team at the

end of the quote when indicating that in the event of an immediately difficult decision situation, the ultimate goal is to bring the team together as quickly as possible.

The second aspect of a CEO's renewed sensemaking connects to the fact that a *CEO asks for validation*. One CEO elucidates this activity as follows:

But I surely do consult a lot and my style of management is collaborative enough that I have a senior team now which I've created this year (...). The five of us sit down every week and we go through all of the weekly wins and concerns from the different groups of the company. And so, taking on that feedback, that, sort of, three sixty degree, we're getting an idea of where the concerns are. (110 MENA Services)

The quote explains how a CEO refers to the senior management team for validation. In fact, there is a weekly meeting in place with a 360 degrees feedback where the CEO gets input from four other management team members. In these regular consultations, all weekly problems and successes are systematically discussed and jointly analyzed. Such meetings thus offer the appropriate environment for a CEO to determine corresponding validation.

The third aspect revolves around the circumstance that a CEO is *making use of doubt*. One CEO elucidates the importance of doubt as follows:

I open up myself (...) and if they perceive doubts, that does not bother me. I also have no problems in telling people I am convinced on something, even if I am not that convinced. I share a lot with them, and I think they are my sounding board. (121 LATAM Consumer)

The quote emphasizes how the CEO is making use of doubt. While the CEO openly expresses doubt to others, the CEO also sometimes conceals doubts. In the case of the first use of doubt, the CEO may stimulate people to openly provide their feedback and on this basis then evaluate previous or prospectively anticipated ways of thinking and acting. The latter is probably used in the case of ideas that the CEO may still have a few doubts about. Validation in this sense is equated with the non-opposing on the part of a third party. In a nutshell, the usability of doubt seems to find different and context-specific application forms.

The fourth aspect concerns the point that a *CEO tests ideas by asking questions*. One CEO elucidates the importance of asking questions as follows:

[I]t goes back to listening to stakeholders or other observers of the industry, so you don't get caught in groupthink. (...) Watch out for this and just dig under, keep asking questions on the

internal change to see whether actually what people are saying to you is on target. Are they just telling you what they think you want to know? (022 EUR Industrial)

The quote illuminates how a CEO tests ideas by asking questions. Testing ideas by asking questions helps the CEO in this endeavor for the following two reasons, among others. First, systematically and repeatedly asking questions seems highly relevant since it allows the CEO to investigate whether people are telling what they actually think. Secondly and building upon it, repeated enquiries allow a CEO to get closer to the detection of organizational reality. However, as indicated at the beginning of the quote, asking questions to different actors is helpful because it allows the testing of ideas that go beyond one's own nose.

Consolidation and Consensus

The 'Consolidation & consensus' phase is where sensemaking of the decision is finalized and sensegiving by the CEO to the team and other stakeholders happens so as to achieve consensus, buy-in and/or legitimacy. This is the final phase of the sensemaking-to-decision making process that the CEO goes through. The prevalent aspect of this phase is that of communicating the outcome to the team and more broadly to those implementing the decision and then securing organizational buy-in. At this phase, sensemaking and sensegiving are reversed with the CEO doing most of the sensegiving and the organization the sensemaking.

CEO gives sense of decision to TMT. Having re-calibrated sensemaking at the end of the 'Consultation & contestation' phase, the CEO gives sense of their independent decision to the team. We identified two aspects clarifying how CEOs give sense to their team members.

The first aspect relates to CEOs' engagement in *creating legitimacy and consensus to achieve stakeholder buy-in*. One CEO describes this engagement as follows:

Of course the proper analysis, that is a given but the main thing, I would say that if you stand face to face to people, they definitely do accept also tough news. If you take the responsibility, then your chances of getting (...) I wouldn't say understanding but at least acceptance of the decision, that you stand a pretty good chance there. (086 MENA Consumer)

In this statement, the CEO explains the importance of combining a systematic analysis of a situation with face-to-face communication in the event of severe news. This combination allows

the creation of legitimacy and consensus and the achievement of stakeholder buy-in. The CEO thereby particularly illuminates how face-to-face communication allows to create acceptance even in cases that are about convincingly conveying negative content.

The second aspect relates to the *need to share responsibility*. One CEO explains the importance of joint responsibility as follows:

Depending on what the issue is, I'll definitely engage far and wide. I'm one that talks a lot about those big decisions, (...) and there's got to be trust obviously, but I don't make decisions by myself. I don't put myself into a cave on those. (053 APAC Services)

This interview excerpt depicts the need to share responsibility in case of pending important and great decisions. In order to achieve shared responsibility in such cases, the CEO engages with different actors in the near and far environment and talks a lot about the decision-making process, aimed at getting more people on board.

CEO gives sense to organization. At the end of the 'Consolidation & consensus' phase, the CEO gives sense of the processed information and associated decisions to the organization. We identified three aspects clarifying how CEOs give sense of decision to their organizations.

The first aspect concerns the circumstance that a *CEO is communicating to others*. One CEO describes this way of communication as follows:

Where you want to go and communicate and then execute. And of that, I believe the communication is the most important part, (...) I think 80% of the game is (...) the ability to communicate, the ability to attract people, the ability to convince and get their commitment towards the change. (...) [Y]ou need passion, you need the patience to really communicate with thousands ... tens of thousands of people. (115 APAC Consumer)

This quote emphasizes how critical communication is for the CEO. In fact, the CEO mentions that "eighty percent of the game is communication". Winning people over and getting them to execute an idea only works through communication.

The second aspect is associated with the fact that CEOs are *engaging and inspiring others*. One CEO explains such activities as follows:

So easy to say, difficult to do, (...) how do you communicate and convince the people - and that's in our case, you know, twenty-four thousand. It's not a small number. (...) How do you convince and mobilize them towards this brave new world. You have to, number one, know

the right direction, set the right strategy and mobilize and convince them to follow your lead, that's what's needed. (066-APAC Services)

The quote illuminates the circumstance that a CEOs needs to be capable of engaging and inspiring others. As suggested by the quote, a CEO thereby may mobilize others by clearly defining the direction and showing a convincing strategy for implementation.

The third aspect concerns *sensehiding*. One CEO explains how this is done as follows:

But managing that and getting people to do certain things, fully knowing upfront that once they've done it, that's the end of their shelf life and they will be replaced. Those things are tough because you can't give people the full picture, then they won't do it. (101 AFR Finance)

The CEO clearly mentions that sensehiding is an important aspect of managing and getting people to do something. More specifically, withholding that some staff members will be later replaced provides the necessary foundation to initially motivate them, since they would never voluntarily do so, had they known the full implications.

DISCUSSION

We found three main phases characterizing the interaction between a CEO and the others that influence CEO sensemaking and decision-making. The first phase “*Collection*” encompasses three successive sub-phases: (1) ‘CEO demands sense inside/outside the organization (Phase I)’ is characterized by a CEO actively seeking exposure to cues within and outside the organization regarding the sought-after information. Subsequently, the environment gives sense to the CEO which we labelled as (2) ‘Others give sense to CEO’. Then, a (3) ‘CEO makes sense of the context’ (Phase I). The latter is often, but not always, moderated by a CEO’s intuition.

The second phase “*Consultation & contestation*” consists of four sub-phases: With the intention to continue to seek more information and/or test previous sensemaking, a (4) ‘CEO demands sense from TMT (Phase II)’ aimed at challenging the CEO’s view and/or providing different perspectives. At this point, the CEO thus voluntarily, temporarily and nominally concedes some of the position-specific power by allowing equivocality, meaning the simultaneous existence of several interpretations by members of the TMT. Subsequently, there is (5) ‘TMT beaks sense toward CEO’, which is essentially about breaking what the CEO has previously made sense of.

On this basis, there is (6) ‘TMT gives sense toward CEO’, leading to CEO’s new sensemaking (i.e. second sensemaking phase for the CEO) which is basically characterized by a situation in which (7) a ‘CEO makes sense of own prior decisions (Phase II)’. In the case of the latter, the CEO engages among other things in testing prior decisions (e.g. by collecting as many views as possible, via expert advice or by trying to identify blind spots) and seeking to validate prior sensemaking (validation can be just a formality or the CEO really feels the need for validation by others or looks for sounding boards to test own sensemaking).

The third phase “*Consolidation & consensus*” is composed of two sub-phases, both illustrating that a CEO retracts the power that has been previously voluntarily conceded and brings back univocality (i.e. CEO’s voice only): With such re-calibrated sensemaking, the (8) ‘CEO gives sense of decision to TMT’. Next, the (9) ‘CEO gives sense to organization’ of the processed information and associated decisions. This may require filtering information (sensehiding) for political or practical reasons. Figure 1 provides an overview of the different phases and sub-phases of the CEO-TMT interaction. We will now discuss how our framework adds to research.

Insert Figure 1 about here

CEO and Others - the Interaction

The model we propose allows us to capture the CEOs’ interactions with others and predominantly with the TMT in the process of decision-making. We have been able to unpack the dynamics of this interaction and show how the decision-making process is characterized by the oscillation between the CEO and others. Unlike traditional approaches to decision-making assuming a predominantly top-down process (Cyert & March, 1963), we found this to be quite removed from what actually happens within and outside the boardroom. Although in each of the three phases identified the interaction is initiated by the CEO, the information flow and exchange is such that the CEO often gives power and voice away to others to later take it back once each stage has matured allowing to move the process further. In the first phase of Collection, the interaction is with a wider pool of actors. In the second phase of Consultation

& Contestation, the interaction is more contained between the CEO and the TMT with the limited support of selected others (occasionally external to the TMT or even the organization) as sources of validation or sounding boards. In other words, the net of interactions is smaller as decision-making moves from the first to the second phase. In the last phase of Consolidation & Consensus, the interaction is one-sided in that the CEO communicates the results of decision-making process to the TMT and the organization.

The interactions between CEOs and the TMT has been the subject of research particularly over the last 15 years (Hambrick & Mason, 1984; Peterson, Martorana, Smith & Owens, 2003; Chatterjee and Hambrick, 2007; Hambrick, 2007; Ling, Simsek, Lubatkin and Veiga, 2008; Gerstner, König, Enders & Hambrick 2013; Ou et al., 2014; Chatterjee & Pollock, 2017; Ma & Seidl, 2018), ranging from exploration of the effects of CEO personality (e.g. Peterson, 1997; Ou et al., 2014) and to the impact of such interactions on organizational performance (Ling et al., 2008; Peterson et al., 2003). Often research has treated this CEO-TMT interaction as a unit, rather dissecting how the dynamics of such interaction unfold (Peterson, Martorana, Smith & Owens, 2003). Moreover, even when such interactions are examined in more recent studies, they tend to present this interaction, not really as “inter”-action, but rather as mono-action or mono-direction, in the sense that the action starts from one actor (i.e. the CEO) and stops at another or others (i.e. the TMT). Our study indicates that the interaction is much more dynamic, manifesting itself as a pendular exchange of power and voice between the CEO and others. The emergence of multivocality and (as a result) also equi-vocality democratizes decision-making. As Sonenshein (2007: 1027) notes, “[o]rganizational life is often equivocal and uncertain, and the very construction of a particular issue reflects (at least in part) each individual’s expectations and motivations.” For a CEO to allow these multiple expectations and motivations to unfold and be expressed, requires letting go of control, or put more simply, become less directive and more open. For that to happen in an honest rather than simply performative way, the CEO will

have previously created an environment of “psychological safety” (Edmondson, 1999) that allowed this multivocality and the ensuing equivocality to take place – in the first place.

The process resembles less that of an orchestra with the CEO being the conductor and more like a CEO-controlled theatrical improvisation. In other words, while the CEO controls how decision-making plays out and when voice and power is given and retracted, the information flow and what insights emerge from the decision-making discussions are unscripted. The choice of TMT members and how the interaction with them plays out will vary depending on CEO personality (Peterson, Martorana, Smith & Owens, 2003), CEO needs (Ma & Seidl, 2018) and the context within which decision-making takes place (Jianhong & Nadkarni, 2017). Interestingly, we found that the TMT is not the only source of insight or validation or sounding board for the CEO. CEOs selectively engaged in their interactions, where needed, but in a rather controlled way, and also insights from individuals that are external to the organization such as family members and other trusted personal advisors within and outside the organization. The influence of these parties is more in line with CEOs’ attempts to maintain an open mind that would ultimately allow them to make more informed decisions.

CEO Decision-Making

Our CEO sensemaking-to-decision-making model unpacks the dynamic interplay between rationality and intuition. The model’s successive steps inform on when and why the one or the other dominates accordingly. In the Collection phase, the third step in which a CEO initially makes sense of the context reflects CEO’s oscillation between retrospective rationalizing and applying intuition as a moderator. In the Consultation & contestation phase, the fifth step in which the team engages in sensebreaking toward a CEO similarly depicts the dynamic rationality-intuition interplay. On the one hand, the team intellectually challenges a CEO’s assumptions, while also providing to the CEO emotional or other support.

Our model further reduces the gap between two academic discussions on making judgements and reaching decisions in complex situations that have tended to be separated from one another.

Rationalist-cognitive approaches emphasize that decision-making relates to information processing, calculation and rationalizing. Rationalist-cognitive approaches build on the assumption that actors confronted with difficult moral decision situations make logical calculations and draw on cognitive philosophical principles (e.g., Kohlberg, 1969). Others shift from highlighting the role of rationalization to highlighting the role of intuition (e.g., Haidt, 2003; Sonenshein, 2007). This shift is part of a broader trend towards recognising that thinking is often an automatic, quick and emotional process (Kahneman, 2011). However, more recent research suggests that both intuitions and rationalization matter in the context of groups. Haidt (2012, p. 55) shows that others “can do for us what we cannot do for ourselves: they can challenge us, giving us reasons and arguments [...] that sometimes trigger new intuitions”. Social interactions are characterized by a rationality-intuition interplay as “providing logically compelling arguments” involves “triggering new [...] intuitions in the listener” (Haidt, 2001, p. 818). Our model further unpacks the rationality-intuition interplay in the context of CEOs’ judgement and decision making in complex situations as, for instance, when CEOs have to decide on dismissals with potentially drastic implications for the persons affected: In the collection phase, for example, intuitions moderate a CEO’s retrospective rationalizing, and, in the consultation & contestation phase, the team cognitively challenges CEO assumptions while providing emotional support for the CEO.

Our work further develops previous social intuitionists models (Haidt, 2001; Sonenshein, 2007). Haidt’s (2001) ‘social intuitionist model of moral judgment’ suggests that intuitions have a much stronger influence than rational deliberation does. Haidt (2001) thereby builds on two fundamental assumptions. Firstly, the model downplays the private aspect of rational reasoning and instead emphasizes its social dimension. Secondly, Haidt (2001) suggests that rational reasoning is generally the result of intuitions. Consequently, rationalizing does not cause decision-making, but instead takes place normally after a decision has been made. Our model builds on these assumptions and develops them further by providing more nuance to how this

social dimension unfolds. Firstly, our focus on the interaction between CEOs and others helps us to systematically work out the social aspect of CEO's sensemaking and decision-making. Unlike Haidt's (2001) theoretical model, we draw on empirical evidence to develop a model that clearly shows when and why the CEO or others (i.e. the TMT) are involved at different stages of decision-making, and thereby details the chronological order of the dynamic interactions between the different actors involved. Secondly, we show that intuition and rationalization do not take place along a linear process, but rather via a circular and dynamic process. The various steps and phases of our model capture the permanent oscillation between a CEO's intuition and rationalizing in difficult decision-making situations.

Sensemaking

Our model allows us to unpack how the interaction dynamics between CEOs and others (i.e. TMT members) influence sensemaking in CEO's decision-making. Due to limited access to the upper echelons of organizations (Kakabadse et al., 2015; Thomas, 1993), CEO sensemaking remains still an area of uncharted waters for researchers in the field. There is a dearth of research on cognition at the CEO level and thus little is still known about how the CEO-TMT interface cognitively influences CEO sensemaking (Bromiley & Rau, 2016). Our study has allowed to unpack the interaction dynamics between the CEO and others as they individually and collectively engage in meaning-making. These dynamics are captured in our sensemaking-to-decision-making model which showcases how power is performatively traded in the boardroom when the CEO invites and revokes multivocality and how CEOs experience sensedemanding, sensemaking, sensegiving and sensehiding in C-suite decision-making.

Power has remained relatively unexplored within the sensemaking research and several scholars have called for more studies that explore the links between the two (Sandberg & Tsoukas, 2015: 23; Balogun et al., 2014: 192; Brown et al., 2015). Our study has provided real-life evidence of how sensemaking "is both an effect, and productive, of what are continuously negotiated relations of power" (Brown et al., 2015: 269). The 'Consultation & Contestation' phase of our

model explains power-breaking (between the CEO and the team) where CEOs allow sensebreaking to happen by giving power to the TMT to dissent. The interesting aspect here is how on the one hand multivocality and the ensuing equivocality is encouraged by the CEO but on the other hand, this is controlled by the CEO so that there is no mutiny in the ranks. This is because multivocality is performative rather than actual. This means that a CEO's call for dissension leads to multivocality and equivocality, but such dissension is contained to the purpose of resolving the task at hand rather than being an invitation for dissension to power. Hence, the retraction of power and ensuing ownership of decision-making by the CEO is safeguarded. Sensemaking is dependent on language, talk and communication (Balogun et al., 2014) and this becomes the basis for the trading of univocality to multivocality in the boardroom, hence opening the ground for equivocality to manifest. The fostering of discussions that "celebrate multiple perspectives" compared to "suppression of opposing viewpoints" can help organizations' sensemaking capacity (Sonenshein, 2007: 1037). The role of discourse in sensemaking has been largely underexplored, despite its acknowledged performative power (Balogun et al., 2014). While Balogun et al. (2014: 189) suggest that the intentional use of discursive practices reinforces hegemonic positions in strategic conversations, our data showed that the exact opposite also holds true. Under specific contexts, strategic actors (CEO) intentionally use discursive practices to concede hegemony (TMT) for the purpose of their own sensemaking and to achieve better quality of decision-making. In other words, each member – CEO and team- 'enact' a role – they do not 'become' the role.

A further aspect emerging from our study is the interplay between individual and collective sensemaking in the C-suite. Ou et al. (2014) suggest that CEOs can form collective meanings in a way that transcends hierarchical levels and affects the attitudes and behaviors of employees at all organizational levels. We found that the interaction dynamics between a CEO and others with a view to produce collective meaning and to reach a decision is far from linear and shaped by the voluntary "surrendering" of power by the CEO to others. Our model simultaneously

captures the individual dimension (i.e. sensemaking within individuals) and the social dimension of sensemaking (i.e. between individuals). Sensemaking can happen either within individuals, involving collective meaning-making (where individuals advocate for their view and engage in influence tactics to shape others' understandings) or between individuals where "intersubjective meaning is constructed through a more mutually co-constituted process" where "members jointly engage with an issue and build their understanding of it together" (Maitlis & Christianson, 2014: 78). In the context of CEO decision-making, we found that sensemaking happens interchangeably between these two modes. It happens 'within individuals', by means of multivocality (advocacy of views) and the creation of conversation space where CEOs have their views challenged, hence, nominally giving away some of their power to develop better quality of sensemaking in return. However, it also happens 'between individuals' as meaning is co-created between the CEO and his/her team. Essentially, the decision-making process involves *oscillation* within and between individuals engaging in four types of sense processes: sensemaking, sensegiving, sensebreaking and sensehiding.

Finally, our model provides new insights into sensedemanding, one aspect of the sensemaking process that has so far been underplayed and understudied. We found two different patterns of sensedemanding. The first is straightforward and involves the CEO gathering information during the 'Consultation' phase. There, sensedemanding directly triggers sensegiving. This pattern reflects what we already know as sensedemanding according to the literature. Via sensedemanding individuals try to improve the quality of the information upon which they reach a decision and reduce the level of uncertainty (Vlaar et al., 2008: 240; see also Weick, 1969: 40). The second pattern – observed in the 'Consultation & Contestation' phase – is more complicated. In this phase, sensedemanding is manifested when the CEO invites dissent. There, a more complicated loop is observed whereby the sensedemanding-sensegiving process is mediated by sensebreaking. So in that phase, sensegiving is not produced by building new blocks of information, but rather by breaking barriers and removing sensemaking barriers, via

sensebreaking. The distinction between these two patterns helps us understand how the way in which sensedemanding takes place (i.e. asking for more information vs. asking to be challenged) defines the format and nature of sensegiving and as a result how new insights are generated. With sensedemanding being one of the less researched constructs in the sensemaking literature our study invites future research that unpacks further these different patterns.

Conclusions

Our study unfolded the dynamics of sensemaking as the product of interactions between the CEO and others, as the struggle between intuition and rationality and as the interplay of sensemaking, sensegiving, sensedemanding and – to some extent – sensehiding. Via our CEO sensemaking-to-decision-making model we showcased the systemic (Weick et al, 2005) and social nature of sensemaking (Maitlis & Christianson, 2014). We call for more studies on sensemaking and decision-making at TMT level, including studies that could unveil how power asymmetries may be used for the benefit of collective sensemaking - rather than at its expense.

REFERENCES

- Arendt, L. A., Priem, R. L., & Ndofor, H. A. (2005). A CEO-adviser model of strategic decision making. *Journal of Management*, 31(5): 680–699.
- Balogun, J., Jacobs, C., Jarzabkowski, P., Mantere, S., & Vaara, E. (2014). Placing Strategy Discourse in Context: Sociomateriality, Sensemaking, and Power. *Journal of Management Studies*, 51(2): 175–201.
- Bamberger, P.A. & Pratt, M.G. (2010). Moving forward by looking back: Reclaiming unconventional research contexts and samples in organizational scholarship. *Academy of Management Journal*, 53(4): 665–671.
- Bishop, D. G., Trevino, L. K., Gioia, D. & Kreiner, G. E. (in press) Leveraging a Recessive Narrative to Transform Joe Paterno's Image: Media Sensebreaking, Sensemaking, and Sensegiving During Scandal. *Academy of Management Discoveries*, Published Online:12 Nov 2019. DOI: <https://doi.org/10.5465/amd.2019.0108>
- Blaikie, N. 2000. *Designing Social Research*. Cambridge: Polity Press.
- Bromiley, P. & Rau, D. (2016). Social, behavioral, and cognitive influences on upper echelons during strategy process. *Journal of Management*, 42(1): 174–202.
- Brown, A. D. 2000. Making sense of inquiry sensemaking. *Journal of Management Studies*, 37(1), 45–75.
- Brown, A. D., Colville, I., & Pye, A. (2015). Making sense of sensemaking in organization studies. *Organization Studies*, 36(2): 265–277.
- Chatterjee, A., & Hambrick, D. C. (2007). It's All about Me: Narcissistic Chief Executive Officers and Their Effects on Company Strategy and Performance. *Administrative Science Quarterly*, 52(3): 351–386.
- Chatterjee, A., & Pollock, T. G. (2017). Master of Puppets: How narcissistic CEOs construct their professional worlds. *Academy of Management Review*, 42(4): 703–725.

- Creswell, J. W. (2003). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. Thousand Oaks, CA: Sage.
- Cyert, R. M. & March, J. G. (1963). *A Behavioral Theory of the Firm*. Englewood Cliffs, N.J.: Prentice-Hall.
- Dane, E., & Pratt, M. G. (2007). Exploring intuition and its role in managerial decision making. *Academy of Management Review*, 32(1): 33–54.
- Edmondson, A. (1999). Psychological Safety and Learning Behavior in Work Teams. *Administrative Science Quarterly*, 44(2): 350–383.
- Eisenhardt, K. M. (1989a). Making fast strategic decisions in high-velocity environments. *Academy of Management Journal*, 32(3): 543–576.
- Eisenhardt, K. M., & Zbaracki, M. J. (1992). Strategic decision making. *Strategic Management Journal*, 13: 17–37.
- Eisenhardt, K.M. (1989b). Building Theories from Case Study Research. *Academy of Management Review*, 14(4): 532–550.
- Elbanna, S., & Child, J. (2007). Influences on strategic decision effectiveness: Development and test of an integrative model. *Strategic Management Journal*, 28(4): 431–453.
- Elbanna, S., Child, J., & Dayan, M. (2013). A Model of Antecedents and Consequences of Intuition in Strategic Decision-making: Evidence from Egypt. *Long Range Planning*, 46(1/2): 149–176.
- Gerstner, W., König, A., Enders, A., & Hambrick, D. C. (2013). CEO narcissism, audience engagement, and organizational adoption of technological discontinuities. *Administrative Science Quarterly*, 58(2), 257–291.
- Gioia DA, Corley KG, Hamilton AL. (2013). Seeking qualitative rigor in inductive research: Notes on the Gioia methodology. *Organizational Research Methods*, 16(1): 15–31.
- Gioia, D. A. & Chittipeddi, K. (1991). Sensemaking and sensegiving in strategic change initiation. *Strategic Management Journal*, 12(6): 433–448.
- Gunia, B. C., Wang, L., Huang, L., Wang, J., & Keith Murnighan, J. (2012). Contemplation and conversation: subtle influences on moral decision making. *Academy of Management Journal*, 55(1), 13–33.
- Haidt, J. (2001). The Emotional Dog and Its Rational Tail: A Social Intuitionist Approach to Moral Judgment. *Psychological Review*, 108(4): 814–834.
- Haidt, J. (2003). The emotional dog does learn new tricks: A reply to Pizarro and Bloom (2003). *Psychological Review*, 110(1): 197–198.
- Hambrick, D. C. (2007). Upper echelons theory: An update. *Academy of Management Review*, 32(2): 334–343.
- Hambrick, D. C., & Mason, P. A. (1984). Upper Echelons: The Organization as a Reflection of Its Top Managers. *Academy of Management Review*, 9(2): 193–206.
- Jianhong, C., & Nadkarni, S. (2017). It's about Time! CEOs' Temporal Dispositions, Temporal Leadership, and Corporate Entrepreneurship. *Administrative Science Quarterly*, 62(1): 31–66.
- Joseph, J. & Gaba, V. (in press). Organizational structure, information processing, and decision making: a retrospective and roadmap for research. *Academy of Management Annals*, Published Online: 8 Nov 2019. DOI: <https://doi.org/10.5465/annals.2017.0103>
- Kahneman, D. (2011). *Thinking, Fast and Slow* (1st ed.). New York: Farrar, Straus and Giroux.
- Kakabadse, N. K., Figueira, C., Nicolopoulou, K., Hong Yang, J., Kakabadse, A. P., & Özbilgin, M. F. (2015). Gender Diversity and Board Performance: Women's Experiences and Perspectives. *Human Resource Management*, 54(2): 265–281.
- Khatri, N., & Ng, H. A. (2000). The role of intuition in strategic decision making. *Human Relations*, 53(1): 57–86.

- Kohlberg, L. (1969). Stage and sequence: The cognitive-developmental approach to socialization. In D. A. Goslin (Ed.), *Handbook of Socialisation Theory and Research* (pp. 347–480). Chicago: Rand McNally.
- Ling, Y., Z. Simsek, M. H. Lubatkin, and J. F. Veiga (2008) Transformational leadership's role in promoting corporate entrepreneurship: Examining the CEO–TMT interface. *Academy of Management Journal*, 51: 557–576.
- Locke, K. D. (2001). *Grounded theory in management research*. London: Sage.
- Ma, S., & Seidl, D. (2018). New CEOs and their collaborators: Divergence and convergence between the strategic leadership constellation and the top management team. *Strategic Management Journal*, 39(3): 606–638.
- Ma, S., Kor, Y. Y., & Seidl, D. (2019). CEO advice seeking: an integrative framework and future research agenda. *Journal of Management*, Published Online: 11 Nov 2019. DOI: <https://doi.org/10.1177/0149206319885430>
- Maitlis, S. & Christianson, M. (2014). Sensemaking in Organizations: Taking Stock and Moving Forward. *Academy of Management Annals*, 8(1): 57–125.
- Maitlis, S., & Lawrence, T. B. (2007). Triggers and enablers of sensegiving in organizations. *Academy of Management Journal*, 50(1): 57–84.
- Maitlis, S., & Sonenshein, S. (2010). Sensemaking in crisis and change: Inspiration and insights from Weick (1988). *Journal of Management Studies*, 47(3), 551–580.
- Matzler, K., Bailom, F., & Mooradian, T. A. (2007). Intuitive Decision Making. *MIT Sloan Management Review*, 49(1): 13–15.
- McCrae, R. R., & Costa, P. T. (1997). Conceptions and correlates of Openness to experience. In R. Hogan, J. Johnson, & S. Briggs (Eds.), *Handbook of Personality Psychology* (pp. 825–848). San Diego, CA: Academic Press.
- Mengis, J., & Eppler, M. J. (2008). Understanding and managing conversations from a knowledge perspective: an analysis of the roles and rules of face-to-face conversations in organizations. *Organization Studies*, 29(10): 1287–1313.
- Miller, C. C., & Ireland, R. D. (2005). Intuition in strategic decision making: Friend or foe in the fast-paced 21st century? *Academy of Management Executive*, 19(1): 19–30.
- Mooney, A. C., & Amason, A. C. (2011). In search of the CEO's inner circle and how it is formed. In M. A. Carpenter (Ed.), *The Handbook of Research on Top Management Teams*. Cheltenham, England: Edward Elgar Publishing.
- Nadkarni, S., & Chen, J. (2014). Bridging yesterday, today, and tomorrow: CEO temporal focus, environmental dynamism, and rate of new product introduction. *Academy of Management Journal*, 57: 1810–1833.
- Ocasio, W. (1997). Towards an Attention-Based View of the Firm. *Strategic Management Journal*, 18: 187–206.
- Ou, A. Y., Tsui, A. S., Kinicki, A. J., Waldman, D. A., Zhixing Xiao, & Jiwen Song, L. (2014). Humble chief executive officers' connections to top management team integration and middle managers' responses. *Administrative Science Quarterly*, 59(1): 34–72.
- Patriotta, G. (2003). Sensemaking on the Shop Floor: Narratives of Knowledge in Organizations. *Journal of Management Studies*, 40(2): 349–375.
- Patriotta, G., & Spedale, S. (2009). Making sense through face: identity and social interaction in a consultancy task force. *Organization Studies*, 30(11): 1227–1248.
- Patton, J. R. (2003). Intuition in decisions. *Management Decision*, 41(10): 989–996.
- Peterson, R. S. (1997). A directive leadership style in group decision making can be both virtue and vice: evidence from elite and experimental groups. *Journal of Personality & Social Psychology*, 72(5): 1107–1121.
- Peterson, R. S., Martorana, P. V., Smith, D. B., & Owens, P. D. (2003). The Impact of Chief Executive Officer Personality on Top Management Team Dynamics: One Mechanism by

- Which Leadership Affects Organizational Performance. *Journal of Applied Psychology*, 88(5): 795.
- Pitesa, M., & Thau, S. (2013). Compliant Sinners, Obstinate Saints: How Power and Self-Focus Determine the Effectiveness of Social Influences in Ethical Decision Making. *Academy of Management Journal*, 56(3): 635–658.
- Pratt, M. G. (2000). The good, the bad, and the ambivalent: Managing identification among Amway distributors. *Administrative Science Quarterly*, 45(3): 456–493.
- Pratt, M. G. (2009). For the Lack of a Boilerplate: Tips on Writing Up (and Reviewing) Qualitative Research. *Academy of Management Journal*, 52(5): 856–862.
- Roberto, M. A. (2003). The stable core and dynamic periphery in top management teams. *Management Decision*, 41(2): 120–131.
- Sadler-Smith, E. (2016). What happens when you intuit?': Understanding human resource practitioners' subjective experience of intuition through a novel linguistic method. *Human Relations*, 69(5): 1069–1093.
- Salas, E., Rosen, M. A., & DiazGranados, D. (2010). Expertise-based intuition and decision making in organizations. *Journal of Management*, 36(4): 941–973.
- Sandberg, J., & Tsoukas, H. (2015). Making sense of the sensemaking perspective: Its constituents, limitations, and opportunities for further development. *Journal of Organizational Behavior*, 36: S6–S32.
- Sonenshein, S. (2007). The role of construction, intuition, and justification in responding to ethical issues at work: The sensemaking-intuition model. *Academy of Management Review*, 32(4): 1022–1040.
- Strauss A, Corbin J. (1998). *Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory*. Thousand Oaks, CA: Sage
- Thomas, R.J., (1993). Interviewing important people in big companies. *Journal of Contemporary Ethnography*, 22(1): 80–96.
- Vaara, E., & Monin, P. (2010). A recursive perspective on discursive legitimation and organizational action in mergers and acquisitions. *Organization Science*, 21(1):3–22.
- van Knippenberg, D., Dahlander, L., Haas M. & George G. (2015). Information, Attention, and Decision Making. *Academy of Management Journal*, 58(3): 649–657.
- Vlaar, P. W. L., van Fenema, P. C., & Tiwari, V. (2008). Cocreating understanding and value in distributed work: How members of onsite and offshore vendor teams give, make, demand, and break sense. *MIS Quarterly*, 32(2): 227–255.
- Weick, K. E. (1969). *The Social Psychology of Organizing*, Reading, MA: Addison-Wesley.
- Weick, K. E. (1979). *The Social Psychology of Organizing* (2nd ed). Reading, MA: Addison-Wesley.
- Weick, K. E. (1993). The collapse of sensemaking in organizations: The Mann Gulch disaster. *Administrative Science Quarterly*, 38: 628–652.
- Weick, K. E., Sutcliffe, K. M., & Obstfeld, D. (2005). Organizing and the process of sensemaking. *Organization Science*, 16(4): 409–421.
- Yadav, M. S., Prabhu, J. C., & Chandy, R. K. (2007). Managing the Future: CEO Attention and Innovation Outcomes. *Journal of Marketing*, 71(4): 84–101.

TABLE 1
Data Structure

<i>First-order categories</i>	<i>Second-order themes</i>	<i>Aggregate dimensions</i>
A. Sourcing information B. Sensing the nuances of environment C. Get insight into unfiltered views	1. <i>CEO demands sense inside/outside the organization (Phase I)</i>	P1 Collection
A. External stakeholders provide informative support B. Personal, family and private life influences CEO C. Actors from within the organization advise CEO	2. Others give sense to CEO	
A. Biographical background influences CEO B. Retrospective rationalizing C. Seeking solutions D. Intuition as a moderator	3. <i>CEO makes sense of the context (Phase I)</i>	
A. Communicating and collecting feedback from the team B. Seeking dissent	4. <i>CEO demands sense from TMT (Phase II)</i>	P2 Consultation & contestation
A. The team cognitively challenges CEO assumptions B. Emotional support from the team	5. TMT breaks sense toward CEO	
A. Team and colleagues advise CEO B. Team and colleagues suggest how CEO may think and act	6. TMT gives sense toward CEO	
A. CEO needs to refresh understanding & develop new ideas B. CEO asks for validation C. Making use of doubt D. CEO tests ideas by asking questions	7. <i>CEO makes sense of own prior decisions (Phase II)</i>	
A. Creating legitimacy and consensus to achieve stakeholder buy-in B. Need to share responsibility	8. <i>CEO gives sense of decision to TMT</i>	P3 Consolidation & consensus
A. CEO communicating to others B. Engaging and inspiring others C. Sensehiding	9. <i>CEO gives sense to organization</i>	

Notes: Second-order themes associated with others than the CEO in bold font; second-order themes specific to CEOs in italic font; Second-order themes specific to other stakeholders in regular font.

FIGURE 1
CEO and the others: How interaction dynamics influence sensemaking in CEO's decision-making

